

U.S. Antarctic Marine Living Resources Program

2011-2012 Weekly Field Reports

Cape Shirreff, Livingston Island

Volume 2
November 21, 2011

Science Report

Seabirds

1. We set up all our gentoo and chinstrap reproductive success plots last week. Gentoos had eggs when we arrived and the first chinstrap eggs were seen on 15 November.
2. Currently 36% of the reproductive study gentoo penguins have completed clutches of two eggs, 32% have one egg, 28% have not yet laid eggs and 4% have failed. Of the chinstrap penguins in the reproductive study 4% completed their clutches this week, 35% have laid one egg 1% have failed and 60% have not yet laid eggs.
3. Peak gentoo clutch initiation occurred on 17 November. We plan on censusing the gentoo population here around 24 November.
4. We recovered an overwinter PTT from a gentoo penguin on 14 November. We have also observed at least 6 other gentoos on colony that appear to have had instruments overwinter.
5. We have continued to resight known-aged penguins. There are 14 known-aged gentoos incubating eggs, 2 have already failed and 29% have complete clutches. There are 21 known-aged chinstraps that have initiated clutches so far and 10% have two eggs.
6. We saw our first yearling chinstrap on 15 November.
7. Brown skuas are attending their nesting territories; however none have initiated nest building.

Pinnipeds

8. The last elephant seal to arrive and give birth did at the beginning of this week. We have captured and tagged 41 of the 82 pups born on the Cape. Tissue from the flipper tag hole punches was collected on all of them for later DNA analysis.
9. We have been unable to get to Punta San Telmo just west of Cape Shirreff but we expect there to be some elephant seal pups born there as well.
10. At the last census of fur seal study beaches on 19 Nov we recorded a total of 10 adult females and one pup. The first pup on the Cape was born on 12 Nov this year and the first pup to be born on the U.S. AMLR study site was born on 14 Nov. Many of the females that were on shore left during an unusually cold storm from the east on 18 Nov.



11. We have set up our fur seal attendance VHF receiving stations and have begun range tests of both stations. Adult female fur seal captures do not start for another week and a half but once instrumented with VHF radio transmitters trip durations will be recorded. These standardized data are an important contribution to the CCAMLR Ecosystem Monitoring Program and our one of our best measures of the quality of the summer foraging environment.

12. We have recorded 12 tagged fur seals including four adult females. The rest have all been adult males first tagged as pups.

13. On 15 Nov we had what appeared to be a recently weaned Crabeater pup arrive on the Cape. It was hauled out for two days before departing.

Weather

14. It was above freezing and warm when we arrived on 10 Nov. However, this past week has been cold and mostly below freezing with a small accumulation of snow. The mean temperature for the week was -0.2°C . The high temperature for the week was 4.3°C and the low was -3.9°C . Total precipitation this week was 0.11 inches. Most winds, this week, were from the east with a mean wind speed of only 13.5 mph. Maximum wind speed was 50mph. Sunrise and sunset are now 03:38 and 21:52 and we are gaining about 6 minutes of daylight per day.

Camp

15. We spent part of the week on our annual task of scrubbing walls and shelves of mold and mildew.

16. Because this week was so cold and we're still getting some snow we still will not be able to put up gutters for water collection for another week as just one heavy snow fall can cause damage to our gutters and water collection system.

17. We are all looking forward to Thanksgiving and we dug out our smoker in anticipation. It was buried in over four feet of snow on the east-side of our main hut.



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